

U.S. Forest Service and The Wildlife Society Native American Research Assistantship: Student Application Instructions



Applications due by **JANUARY 17, 2022**

The <u>U.S. Forest Service (USFS)</u>, through partnership with <u>The Wildlife Society (TWS)</u>, is offering research assistantships for Native American undergraduate or graduate students as part of the TWS professional development program for Native Americans. The program will facilitate student mentoring opportunities with USFS Research & Development (R&D) scientists and promote student advancement and training for careers in natural resource and conservation-related fields. A paid stipend of at least \$6,700 will be provided to cover living expenses during the assistantship time-period. The Forest Service uses an ecological science-based approach to make informed decisions on the multiple-use management of the National Forests and Grasslands.

Description

Short-term research assistantships are available for Native American students interested in wildlife and forest resources and excited to learn and work with an interdisciplinary team of researchers. We are seeking upper-level undergraduate (junior/senior) or graduate (M.S. or Ph.D.) students interested in conducting research in one of the following areas:

1. A Delicate Balance: Supporting white-tailed deer (waawaashkeshi) habitat and forest sustainability on Keweenaw Bay Indian Community (KBIC) lands

Project Objectives:

- Analyze data from winter pellet count surveys, browse intensity plots, and aerial photos to develop an understanding of high-use deer areas on KBIC lands
- Collect data and analyze data from existing deer exclosures on the nearby Ottawa National Forest to assess the impact of deer on forest regeneration
- Incorporate research and planning tools from the Northern Institute of Applied Climate
 Science to assess climate change risks to deer and deer habitat and develop appropriate
 adaptation strategies to help meet the tribe's goals for wildlife management and forest
 sustainability
- Prepare education and outreach materials to communicate the results of the project and share these results with diverse audiences including KBIC natural resources managers, policy makers, and community members

Location, Estimated Duration, and Housing:

- L'Anse and Houghton, Michigan
- The assistantship will last for approximately 12 weeks within May August, 2022
- Affordable and local housing is available, and the student must identify, secure and pay for their own housing. Student will be able to work with project leader to identify available options.

Required Skills:

- **Educational Background:** The ideal candidate will have a background in wildlife biology, ecology, forestry, or environmental sciences.
- **Technical Skill Competencies:** The ideal candidate will have GIS experience, as well as a familiarity with basic database software such as Excel and Access. Outdoor navigation and safety training are also desirable. Tree identification skills would also be desirable.
- Communication Skill Competencies: The ideal candidate will be a clear communicator and be prepared to deliver information verbally and in writing. Listening skills will be critical, including understanding instructions for fieldwork and data processing. The candidate must be willing and open to learn from all people, including community members.
- **Physical Demands:** The ideal candidate will be willing and able to conduct fieldwork in remote, rugged locations, and in conditions including times of inclement weather such as snow, rain, or heat. There will be mosquitoes, black flies, and ticks. Must be willing to work flexible hours, including early mornings. Must be in good physical condition, able to perform strenuous duties such as walking long distances and carrying up to 30 pounds of equipment.

2. Bison grazing and grassland birds: Evaluating prairie restoration on Midewin National Tallgrass Prairie

Project Objectives:

- Determine how bison grazing improves the diversity of native vegetation during the restoration of prairie ecosystems
- Determine how grassland birds respond to bison grazing during prairie restoration
- Design and implement a grazing management program for prairie restoration and management that promotes desired conditions for grassland bird habitat
- Provide training opportunities for students

Location, Estimated Duration, and Housing:

- Midewin National Tallgrass Prairie
- The assistantship will last for approximately 12 weeks within May August, 2022
- The Forest Service will provide shared local housing (with other field technicians and graduate students working on the project) at no cost to the student

Required Skills:

- Educational Background: Wildlife biology, ecology, environmental science.
- **Technical Skill Competencies:** Attention to detail, strong observational skills, familiarity with excel, interest and experience in birds and wildlife monitoring a plus.
- **Communication Skill Competencies:** Ability to communicate clearly with all team members. Strong written (report) and oral (poster presentation) communication skills.
- **Physical Demands:** It is expected the student will work 40 hours per week with pre-dawn starts, sometimes in hot and humid conditions and over uneven terrain.

3. Long term monitoring of treated and untreated Mexican spotted owl (Strix occidentalis lucida) territories on tribal lands

Project Objectives:

- Identify the composition of fuel loading in treated and untreated MSO breeding territories (preliminary assessments done)
- Identify the degree to which wildfire risk is reduced in MSO territories that have experienced moderate to low intensity silviculture treatments
- Identify general trends regarding the spatial arrangement of wildfire risk around MSO nest sites
- Correlate MSO occupancy and reproduction rates to fuel loading and wildfire potential within breeding territories

Location, Estimated Duration, and Housing:

- South-central New Mexico, Mescalero Apache Indian Reservation near Ruidoso
- The assistantship will last for approximately 12 weeks within May September, 2022
- Affordable and local housing is available and will be secured or reserved by the Forest Service, and the student would pay for their housing in Ruidoso. Student will be able to work with project leader to identify available options.

Required Skills:

- **Educational Background:** Wildlife and forestry monitoring techniques, ecology, botany and ornithology background/experience is highly preferred.
- **Technical Skill Competencies:** General competency using Excel, GIS, and GPS units as well as hard copy maps and communication radios.
- Communication Skill Competencies: Ability to convey knowledge and information both through oral and written format regarding project purpose, methods, results and conclusion.
- **Physical demands:** Most importantly the student must be able to hike long distances in steep, rugged terrain in adverse weather conditions at high elevations (7,000-9,000ft). This is equivalent to passing a pack or Work Capacity Test (WCT) required for USFS wildland firefighters.

Only a limited number of projects will be funded and are dependent on a suitable student/mentor match.

Expectations:

Applicants will participate in laboratory or field data collection, data entry, and analysis as it relates to wildlife ecology and management.

During the research assistantship students will improve their oral and written communication skills. The successful applicant will be provided the opportunity to assist in publishing manuscript(s) in peer-reviewed journals, popular press, and/or present findings at scientific meetings along with USFS R&D scientists (dependent on travel funding). Students and scientists will integrate traditional ecological knowledge and expertise held by Tribes and Native communities and western science to sustain and restore ecosystems.

Applicants must uphold and conduct their activities in accordance with the <u>Code of Ethics and Standards</u> <u>for Professional Conduct</u> as prescribed by The Wildlife Society. The selected students will be given a brief orientation to The Wildlife Society and to the Forest Service prior to the start of the assistantship.

Applicants will be expected to work independently and as part of a research team. Some travel may be expected for the project.

Qualifications:

Applicants must be a member of an American Indian or Alaska Native tribe, First Nations, or a Native Hawaiian or Pacific Islander, or have another indigenous identification, and <u>be currently enrolled in an undergraduate or graduate program from an accredited academic institution</u>. A bachelor's or master's degree in wildlife biology, ecology, forestry or other closely related natural resource discipline is preferred. Students with associate's degrees from tribal colleges or universities or other community colleges are also eligible. <u>Recent graduates will be considered</u>.

The ideal candidate will have strong verbal and written communication skills with demonstrated capabilities in science writing, ability to work both independently and as a productive member of a research team, and an ability to work under adverse field conditions (possible extreme weather, difficult terrain, venomous snakes and biting/stinging insects). Submission of a writing sample is optional.

Students with a GPA above 3.0 are preferred, and students with a minimum 2.5 GPA will be considered.

Current membership with The Wildlife Society is not required; however, please note if you are a current TWS member.

Additional Information:

The appointment is for 3 months within the 2022 calendar year. Starting dates are negotiable within the context of the seasonality of the research topics. Support includes a living stipend (subject to adjustment depending on housing situation). Provided housing is not guaranteed, but may be available in the area, offered at USFS facilities, or rented in local towns, dependent on project. See the project descriptions for more timing, location, and housing information.

Coverage under a medical insurance plan is required and the responsibility of the applicant. Transportation and relocation to and from the USFS office location will not be paid. Taxes and others federal, state/provincial, and local deductions are the responsibility of the applicant.

Application Procedure

All application materials must be received at jblake@wildlife.org by JANUARY 17, 2022.

To apply, please submit:

- A cover letter indicating to which research project you are applying. Please list your research project preferences in the order of most to least interested.
- Resume/CV
- Official or unofficial academic transcripts
- Verification of Native American ethnicity (e.g. tribal member enrollment)
- Two letters of recommendation

Application packages can be emailed as a single PDF to Jamila Blake, TWS Professional Development Manager, at jblake@wildlife.org.

Applicants can expect to receive a decision in March 2022.

If you have any questions about the application process or the assistantship program please contact Jamila Blake at jblake@wildlife.org or 301-897-9770 x307.